

RICHMOND Hill, Georgia's 2011 Water Quality Report

Your water meets all state and federal regulations for safety

Last year we conducted more than 500 tests for over 90 drinking water contaminants.

This brochure is a snapshot of the quality of the water we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) standards. We are committed to providing you with the information because we want you to be informed. For more information about your water call 912-756-3803 and ask for Rick Lauver.

Special population advisory

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Center For Disease Control guidelines on how to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791.

Drinking water sources

Your water comes from three groundwater wells withdrawing water from the Floridian Aquifer.

Source water assessment information may be obtained by contacting Rick Lauver at 912-756-3803.

Public participation opportunities

Our Board meets on the first and third Tuesday of each month. Please feel free to participate in these meetings.

Contaminants in water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline 800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff,

industrial or domestic wastewater discharges, oil and gas production, mining or farming.

- *Pesticides & herbicides*, which may come from a variety of sources such as agriculture and residential use.
- *Radioactive contaminants*, which are naturally occurring.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems.

Water quality monitoring

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Este informe contiene información importante acerca de su agua potable. Puede que desee que traducido o hablar con alguien que puede traducir si para usted. Water quality data

The table in this report lists all the drinking water contaminants we detected during the 2011 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from testing done January 1 through December 31, 2011. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Richmond Hill is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by running your tap for 1 to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Terms & Abbreviations

- **AL:** Action Level - the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **MCLG:** Maximum Contaminant Level Goal - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MCL:** Maximum Contaminant Level - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **MFL:** million fibers per liter
- **mrem/year:** millirems per year (a measure of radiation absorbed by the body)
- **N/A:** not applicable • **ND:** not detectable at testing limit • **NTU:** Nephelometric Turbidity Units
- **pCi/l:** picocuries per liter (a measure of radioactivity)
- **ppm:** parts per million or milligrams per liter -- (corresponds to one minute in two years)
- **ppb:** parts per billion or micrograms per liter --(corresponds to one minute in 2,000 years)
- **ppt:** parts per trillion or nanograms per liter • **ppq:** parts per quadrillion or picograms per liter
- **TT:** Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water

Substance	MCL in mg/L	MCLG	Our Water	Range of Detection	Sample Date	Violation (Y or N)	Typical Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria	<5% positive	0	0	NA	2011	N	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	positive	0	0	NA	2011	N	Human and animal fecal waste
Inorganic Contaminants							
Copper (ppm) 21 locations*	1.3 (AL)	1.3	0.094	90 th Percentile	2010	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Copper (ppm) 9 locations*	1.3 (AL)	1.3	0.079	90 th Percentile	2011	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	0.42	0.38 – 0.50	2008	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb) 21 locations*	15 (AL)	0	2.5	90 th Percentile	2010	N	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) 9 locations*	15 (AL)	0	2.5	90 th Percentile	2011	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Nitrate (ppm)	10	10	ND	ND	2011	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Substance	MCL in mg/L	MCLG	Our Water	Range of Detection	Sample Date	Violation (Y or N)	Typical Source of Contamination
Nitrite (ppm)	1	1	ND	ND	2011	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfection and Disinfection By products							
Chlorine (mg/L)	4.0	0.20	1.13	0.88 to 1.90	2011	N	Added during treatment for disinfection of Drinking Water
TTHMs [Total trihalomethanes] (ppb)	80	N/A	13.76	NA	2011	N	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60	N/A	5.04	NA	2011	N	By-product of drinking water chlorination

*Regulations do not require monitoring for these contaminants in all states.

Information on *Cryptosporidium*, radon, and other contaminants, if applicable: N/A.

Explanation of other drinking water regulation violations, potential health effects, and steps taken to correct the violations: In 2010, we did not collect the required number of lead and copper samples from residences within the distribution system. We are on a reduced monitoring schedule because the lead and copper levels in the residences that were previously tested were generally very low. According to the Georgia Environmental Protection Division (GAEPD) our listed population in 2010 was greater than 10,000 persons. Systems with a population of greater than 10,000 persons are required to collect samples from 30 residences. In 2010, we collected 21 samples. After consultation with the GA EPD, nine additional samples were collected in 2011. Results for lead and copper sampling conducted in both 2010 and 2011 have been presented in the Contaminant Table (above). Our system is currently in compliance and the GA EPD has scheduled our next round of Lead and Copper sampling for 2013. This indicates that we continue to have low levels of Lead and Copper in our distribution system and can maintain a reduced monitoring schedule.

Explanation of variance/exemption, if applicable: N/A.

Information statements on arsenic, nitrate, lead, and trihalomethanes, if necessary: N/A.



This water quality report was prepared by CH2M HILL OMI, Inc., as a service to the City of Richmond Hill.